Data Sheet

We make sure

FUJITSU COMPUTERS SIEMENS

AMILO Notebook Xa 3530
The art of entertainment

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Pages 6

Experience impressive entertainment, exciting new technologies, inspiring innovations and features unified in the AMILO Notebook X series.

Key Features

Processor technology
- AMD next-generation mobile processor technology

Operating System
- Windows Vista® Home Premium

Innovation
- ATI Hybrid Graphics technology features multi-GPU performance capabilities, automatic power state adjustment for power-savings, and multi-display functionality with the ATI Mobility Radeon™ HD 3650 graphic card with 512 MB dedicated VRAM
- ATI PowerXpress™ technology that dynamically switches between discrete and onboard graphics. Experience great graphics performance while plugged in or switch over to energy efficient integrated graphics when on-the-go for extended battery life

Reliability
- Spill-proof keyboard to protect your notebook against accidentally spilt liquids
  - Enough time to shut down the notebook
  - Have the liquid removed from the notebook
  - Protects your investment and your data
- Engineered in Germany means the test center in Germany tests conformity to international standards and customer-specific requirements
- A+ grade LCD panels for better picture quality

Ease of use
- The silent mode function that causes a noticeable reduction in fan noise
- Multimedia LightTouch™ bar and integrated Vista remote control let you easily play, stop or pause your DVDs or music CDs

Multimedia and Entertainment
- 17-inch LCD WXGA+ display with BrilliantView technology for vivid colors, amazing sharpness and impressive contrast
- The integrated AMILOcam (1.3 mega pixels) with low-light technology for great video quality even in low-light conditions and the built-in digital array microphone are perfect for Internet telephony (VoIP) and video chats
- Enjoy your favorite Hollywood blockbuster on an external display via HDMI (with HDCP support)

Options
- Integrated Blu-ray Disc™ drive and integrated hybrid TV tuner for the ultimate entertainment experience
- Dual hard disk drive with Raid 0/1 function
  Raid 0 function: implements data striping to provide the best possible performance
  Raid 1 function: defines disk mirroring for simultaneous writing of data on two disks
  If one drive becomes defect, all data can be accessed on the second drive

Fujitsu Siemens Computers recommends Windows Vista® Home Premium

Operating system[1] and Recovery	
Operating system	Genuine Windows Vista® Home Premium (32-bit version)
Fujitsu Siemens Computers Recovery Program	Backup and restore the original status of the hard disk and create system restore disks or individual recovery media on CD or DVD are included
Architecture	
System architecture	AMD mobile processor technology
Chipset	AMD 780G + AMD SB700
Processors[1]	
AMD Turion™ X2 Ultra processor	ZM-80 (2.1 GHz, 2 MB L2 cache) ZM-82 (2.2 GHz, 2 MB L2 cache) ZM-84 (2.3 GHz, 2 MB L2 cache) ZM-86 (2.4 GHz, 2 MB L2 cache)
AMD Turion™ X2 Dual-Core processor	RM-70 (2.0 GHz, 1 MB L2 cache) RM-72 (2.1 GHz, 1 MB L2 cache)
AMD Athlon™ X2 Dual-Core processor	QL-60 (1.9 GHz, 1 MB L2 cache) QL-62 (2.0 GHz, 1 MB L2 cache)
Memory	2 SO-DIMM memory slots (no memory on board)
Memory speed	800 MHz
Memory type	DDR 2 RAM
Memory modules	1024 or 2048 MB
Max. memory size[1, 2]	4096 MB
Drives	
Hard disk drive	
HDD type	SATA
HDD size	2.5-inch
HDD speed	5400 rpm
HDD cache	8 MB
HDD capacity[1]	250 or 320 GB with single HDD; 500 (2x 250) or 640 (2x 320) GB with dual HDD
Optical disc drive[1] (built-in)	
ODD type	SATA
ODD technology	SuperMulti-format DVD burner with dual double layer (DL) support
ODD read speed	CD-ROM 24x, DVD-ROM 8x
ODD write speed	CD-R 24x, CD-RW 16x, DVD+R 8x, DVD-R 8x, DVD+RW 8x, DVD-RW 6x, DVD+R DL (8.5 GB) 4x, DVD-R DL (8.5 GB) 4x, DVD-RAM 5x
Blu-ray Disc™ (optional)[1]	
ODD technology	Built-in Blu-ray Disc™ drive incl. SuperMulti-format DVD burner with dual double layer (DL) support
ODD read speed	BD 1.6x, CD-ROM 24x, DVD-ROM 8x
ODD write speed	CD-R 8x, CD-RW 8x, DVD+R 8x, DVD+RW 4x, DVD-R 8x, DVD-RW 4x, DVD+R DL (8.5 GB) 2.4x, DVD-R DL (8.5 GB) 2x, DVD RAM 5x
Display	
Display type	BrilliantView LCD
Display size	17-inch
Display resolution (intern)	1440 x 900 pixels
Display resolution (extern)	1920 x 1200
Resolution type	WXGA+
Reaction time	16 ms
Brightness (typ.)	200 NIT
Contrast (typ.)	400 :1
Compliance with standards	ISO 13406-2 class II

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Graphics	
Dedicated graphics (full name)	ATI Mobility Radeon™ HD 3650 with Hybrid Graphics
Dedicated video memory	512 MB GDDR3
Onboard graphics chip	ATI Radeon™ HD 3200
Shared video memory[3]	Up to 1860 MB depending on installed main memory
3D Benchmark 2006	3600
Graphic features	■ ATI PowerExpress™ technology ■ DirectX® 10 support
Interfaces	
Video	1x HDMI (1.3a) (incl. HDCP and S/PDIF out), 1x VGA
Audio	1x line in, 1x microphone in, 1x line out /headphone out, 1x line out / S/PDIF out
Network	1x LAN (RJ-45)
Data	1x eSATA combined with USB 2.0, 3x USB 2.0, 1x IEEE1394, 1x CIR 1x ExpressCard slot (54 / 34 mm), 1x 15-in-1 card reader[4] SD, miniSD, MicroSD, SDHC MS, MS-Duo MMC, RS-MMC, MMC-Micro MSPRO, MS-PRO Duo, MS-Pro HG, MS-Pro HG Duo M2 xD picture card
TV tuner (option)[1]	1x DVB-T / analog antenna in, 1x AV in
Power supply	1x DC-in
Communication	
Integrated Bluetooth®	2.1
LAN (Local Area Network)	10 / 100 / 1000 Mbps
Built-in WLAN (Wireless Local Area Network)	Yes
WLAN type	draft-n 802.11a/b/g/n
WLAN max. data rate	up to 300 Mbps
WLAN encryption	WEP, WPA and WPA2
For use in	BE, CH, DK, DE, EE, FI, FR, EL, IE, IS, IT, LI, LV, LT, LU, MT, NL, NO, PL, AT, PT, SE, SK, ES, CZ, HU, UK, CY
Multimedia	
Audio	Support of HD audio for S/PDIF output with up to 7.1 channels
Audio chip	Realtek ALC888
Speakers	2x built-in speakers (2 W each)
Microphone	Built-in digital array microphone
Subwoofer	1x built-in subwoofer (3 W)
Input device	Sound volume control via function key or via LightTouch™ bar
AMILOcam	
Image sensor	1.3 mega pixels webcam
Frames per second	30[5]
Features	■ Powered by Logitech® ■ Auto focus ■ Automatic brightness adjustment with status LED (blue: on, red: streaming / application on) ■ Low-light technology for great video-quality even in dark surrounding
Hybrid TV tuner (optional[1])	
Standard	Built-in DVB-T / analog hybrid TV tuner

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Input devices / Control buttons	
Power button	Located left of the keyboard
Keyboard	Spill-proof keyboard with 85 keys, 21 key number block
Touchpad	Hidden touchpad, with left and right mouse button, touchpad disable function via function key combination (Fn+F6)
Multimedia keys	Multimedia LightTouch™ bar located on top of the keyboard to launch the following applications: ■ Silent mode (reduce noise level / fan speed, by reducing the CPU performance, office applications, Internet and DVD playback are not affected) ■ Hybrid graphics to switch between onboard graphics for extended battery runtime and external graphics for better performance ■ DVD playback ■ Skip rewind ■ Play / pause ■ Skip forward ■ Volume control
Hot keys	The following hot keys or key combinations are available ■ Fn+F1 WLAN / BT on / off ■ Fn+F2 TV-tuner on / off ■ Fn+F3 Mute on / off ■ Fn+F4 Volume down ■ Fn+F5 Volume up ■ Fn+F6 Touchpad on / off ■ Fn+F7 AMILOcam on / off ■ Fn+F8 Brightness down ■ Fn+F9 Brightness up ■ Fn+F10 Display switch ■ Fn+F11 Silent mode ■ Fn+F12 Suspend Number block 4 individually configurable quick-start application buttons (A1, A2, A3, A4)
Status indicators	The notebook has 3 status LEDs: ■ Power status (& suspend) Blue (always on): on; Blue blinking: stand by, None: off ■ Battery charge Blue (always on): full, Blue blinking: charging; Red blinking: < 10 % capacity ■ WLAN / Bluetooth Blue: on; None: off
Security	
Supervisor and user password	Yes
Kensington lock	Yes
Lid switch (hidden)	Yes
ACPI functions	ACPI 3.0 compliant for Vista requirement ■ S1 LCD off ■ S3 save to RAM ■ S4 save to disk ■ S5 soft off ■ Silent Mode

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Power System	
Battery[6]	
Battery type[1]	Lithium-Ion battery 8 cells, 14.8 V / 2400 mAh (cell) / 4800 mAh (pack)
Battery runtime (idle mode)[7]	Up to 3:20 hours (with onboard graphics); up to 2:20 hours (with external graphics)
Battery runtime (DVD playback)[8]	Up to 2:25 hours (with onboard graphics); up to 2:05 hours (with external graphics)
Battery charging time (idle mode)[9]	Up to 1:15 hours (with onboard graphics); up to 1:25 hours (with external graphics)
Battery charging time (maximum active mode)[10]	Up to 1:30 hours (with onboard graphics); up to 1:25 hours (with external graphics)
Battery charging time (normal use)[11]	Up to 1:30 hours (with onboard graphics); up to 1:25 hours (with external graphics)
Battery charging time (off mode)	Up to 1:40 hours (with onboard graphics); up to 1:45 hours (with external graphics)
AC Adapter	Dynamic charge supported, ACPI 2.0 supported
Wide Range AC adapter	110 - 240 V AC, 50 - 60 Hz
Output	120 W with 20 V DC, 6 A
Energy consumption	
S0 (idle mode)	18.6 W (with onboard graphics); 23.3 W (with external graphics)
S0 (max. active mode)[12]	52 W (with onboard graphics; 67.6 W (with external graphics)
S3 (stand by / energy saving mode)	0.5 W (with onboard and external graphics)
S4 (hibernate)	0.03 W (with onboard and external graphics)
S5 (off mode)	0.03 W (with onboard and external graphics)
Noise emission	
Idle mode[13]	24.5 dBA (Silent Mode off); 19.7 dBA (Silent Mode on)
Maximum active mode[14]	28.5 dBA (Silent Mode off); 26.3 dBA (Silent Mode on)
Operating conditions	
Operational	5 °C to 35 °C (ambient temperature) 10 % to 90 % relative humidity, non-condensing
AC input	100 - 240 V, 50 - 60 Hz
Dimensions and weight	
W x D x H	398 x 295 x 37.0 (front) / 44.0 (back) mm
Weight	3.6 kg[15]
Certifications	GOST (WLAN) CE Marking R&TTE (WLAN, Bluetooth®)
Warranty	Country specific terms
Operational Software	
Home office	Microsoft® Works Microsoft® Office Home and Student Trial Adobe Reader Windows Mail (within Vista operating system) Windows Calendar (within Vista operating system)
Multimedia	Nero Essentials S (CD / DVD write software) Vista DVD Playback Pack (DVD playback software) Windows Media Player (within Vista operating system Windows Media Center (within Windows Vista® Home Premium operating system) Logitech® QuickCam® application software Optional[1] CyberLink Power DVD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive)
Internet	Microsoft® Internet Explorer Country specific Internet provider
Security	Norman security software solution

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Accessories	
Included	AC adapter 120 W First Battery 8 cells Integrated remote control
Manuals	Manual (on hard disk), quick start guide, safety guide, warranty guide, recovery guide
Drivers	Updates downloadable at http://www.fujitsu-siemens.com

[1] Depending on exact configuration. Please check at your local retailer
[2] DISCLAIMER: Up to 1 GB may not be available with 32-bit operating systems due to system resource requirements if system is preinstalled with 4096 MB RAM.
[3] Shared video memory size may vary depending on configuration. Used video memory size depends on Microsoft® Windows Vista® memory management.
- 1024 MB system memory enables up to 638 MB static and shared memory
- 2048 MB system memory enables up to 1150 MB static and shared memory.
- 3072 MB system memory enables up to 1390 MB static and shared memory.
- 4096 MB system memory enables up to 1860 MB static and shared memory.
[4] An adapter is needed for the following card formats: RS-MMC, MMC-Micro, miniSD, MicroSD, SDHC, MS-Duo, MS-PRO Duo, MS-Pro HG, MS-Pro HG Duo, M2
[5] AMILOcam frame rate can vary significantly depending on the used software application.
[6] DISCLAIMER: Battery life may vary depending on product model, configuration, applications, power management settings and features utilized. Recharge time varies depending on usage. The recharge capacity may decrease after some moths so that the battery lifetime as well as operating time can not be assured for the whole lifetime of the notebook.
[7] Tested with Battery Mark 4.0.1 (“power saver mode”)
[8] DVD playback tested with Vista DVD playback
[9] Tested with Battery Mark 4.0.1
[10] Tested with 3DMark 2006
[11] DVD playback tested with Vista DVD playback
[12] Tested with 3DMark 2006
[13] According to ISO 7779 and ISO 9296
[14] Tested with QAFE 8.01 / 2. sieve.exe(CPU stress test) / Diskload.exe according to ISO 7779 and ISO 9296
[15] Weight may vary depending on actual configuration.

The configuration described in this document is generic only and non-binding. For the exact configuration of your AMILO, please contact your licensed dealer.

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